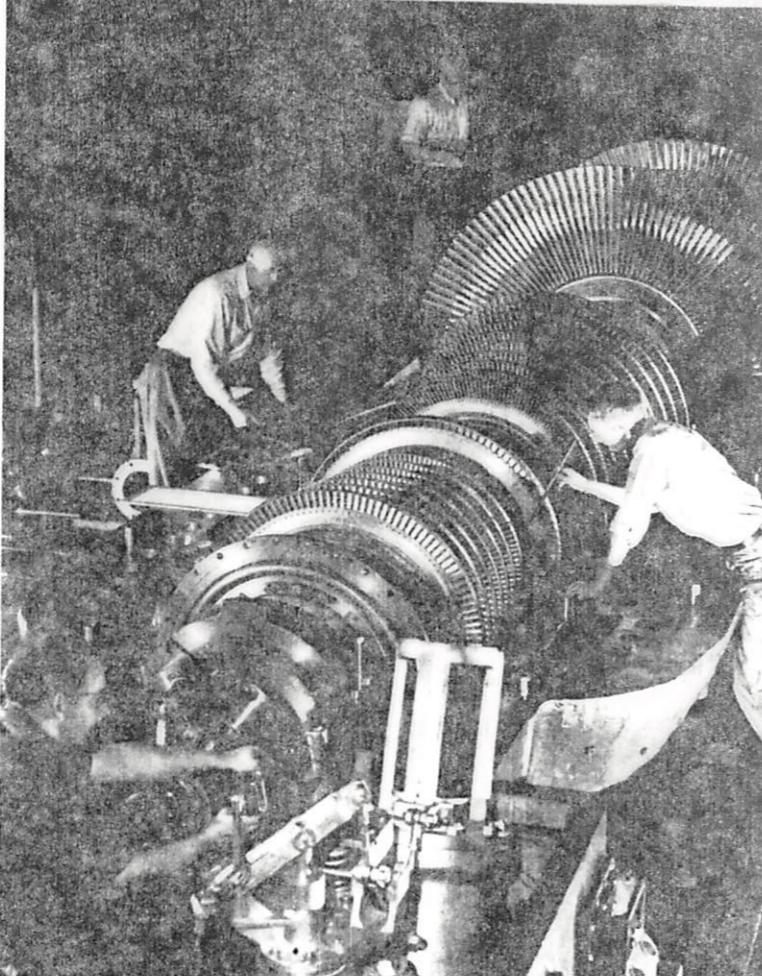
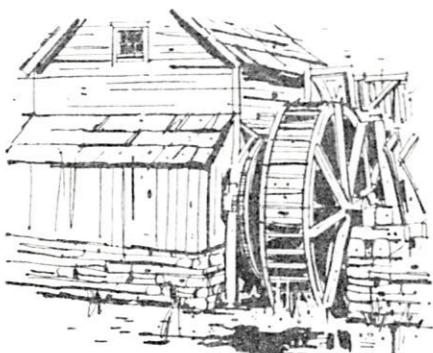
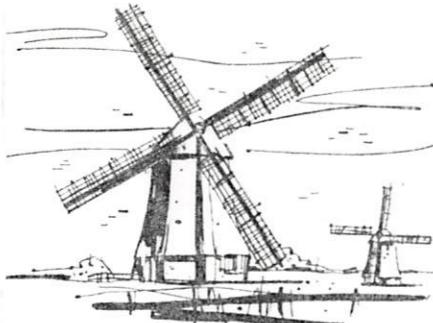


TURBINE



A Powerful Steam Turbine can generate all the electricity needed by about 1,000,000 people. Rushing steam spins bladed wheels, such as those in this partly-assembled turbine. Turbines were developed from the simple windmill, upper left, and water wheel, lower left.

TURBINE, *TUR bahn* or *TUR byn*, is a wheel turned by the force of a moving fluid, such as water, steam, or gas. It changes the force of the fluid into energy that can be used for work. Turbines rank among the simplest and most powerful machines. Generators driven by turbines produce electricity to light homes and to run factories. Turbines also drive ocean liners and some airplanes. A water wheel and a windmill are both turbines. So is a pinwheel that spins when you blow on it. The word *turbine* comes from the Latin word *turbo*, meaning that which *spins* or *whirls around*.

A turbine does not create power. It changes the force of moving fluids into *rotary*, or circular, motion. This motion can do useful work. For example, flowing water

spins a water wheel below a dam. The water wheel turns a generator that produces electricity, which lights homes and drives machinery. In this way, the energy of the flowing water is put to work. Nuclear power plants also use turbines to produce electricity.

There are three main kinds of turbines: (1) water, (2) steam, and (3) gas. Wind turbines are a fourth kind. But they can be used only in a few regions that have fairly steady winds. Water, steam, and gas turbines generate most of the electric power used today.

How Turbines Work

A paper pinwheel, the simplest kind of turbine, turns when you blow on it. But it does not produce much

ELECTRIC LIGHT & POWER COMPANIES

COALVILLE

UTAH POWER & LIGHT CO 31 S Main 336-2441
No Charge To Calling Party Ask Operator For Zenith 775

HEBER CITY

Heber Light & Power Co
Mill Flat Power Plant Snake Creek 654-1291
Office 45 S 100 W 654-1581
If No Answer Call 654-2751
Sub Station 520 W 2 S 654-1131
Superintendent 35 N 5 E 654-2751
Heber Light & Power Co Midway Switching
Rack Stringtown Rd Midway 654-2207